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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/562,410
Filing Date	December 23, 2005
First Named Inventor	Calvin B. Harley
Art Unit	1611
Confirmation No.	6086
Examiner Name	LANDAU, Sharmilla Gollamudi
Attorney Docket Number	38797-8007.US00 (511/002)

Sheet 1 of 4

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number Number-Kind-Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where relevant passages or relevant figures appear
	1.	US-2002/0182272 A1	12-05-2002	Halstead	
	2.	US-2007/0122501 A1	05-31-2007	Harley et al.	
	3.	US-2008/0113925 A1	05-15-2008	Harley et al.	
	4.	US-5,629,154	05-13-1997	Kim et al.	
	5.	US-5,785,977	07-28-1998	Breitbarth	
	6.	US-5,916,565	06-29-1999	Rose et al.	
	7.	US-6,007,989	12-28-1999	West et al.	
	8.	US-6,126,942	10-03-2000	Yang	
	9.	US-6,153,208	11-28-2000	McAtee et al.	
	10.	US-6,277,396 B1	08-21-2001	Dente	
	11.	US-6,855,344 B2	02-15-2005	Chou	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind-Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, where relevant passages or relevant figures appear	T
	12.	CN 1079265 C	02-20-2002	Pei (Abstract Only)		Abs
	13.	CN 1383853 A	12-11-2002	Zheng (English Abstract)		Abs
	14.	JP 62-012791	01-21-1987	Osaka Yakuhin Kenkyusho KK (English Abstract)		Abs
	15.	WO 00/08135 A1	02-17-2000	Board of Regents, The University of Texas System		
	16.	WO 00/31238 A2	06-02-2000	Genetica, Inc.		
	17.	WO 01/01996 A1	01-11-2001	University of Western Australia		
	18.	WO 05/044179 A2	05-19-2005	Hong Kong University of Science and Technology		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Trans
	19.	"Astragalus" www.drugs.com/npp/astragalus.html, 5 pages (Oct. 20, 2008).	

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	20.	BEDIR, E. et al., "Cycloartane triterpene glycosides from the roots of <i>Astragalus brachypterus</i> and <i>Astragalus microcephalus</i> ," <i>J. Nat. Prod.</i> , <u>61</u> :1469-72 (1998).	
	21.	BEDIR, E. et al., "Immunostimulatory effects of cycloartane-type triterpene glycosides from <i>Astragalus</i> species", <i>Biol. Pharm. Bull.</i> , <u>23</u> (7):834-837 (2000).	
	22.	BODNAR, A. G. et al., "Extension of life-span by introduction of telomerase into normal human cells" <i>Science</i> , <u>279</u> (5349):349-52 (1998).	
	23.	CALZADA, L. et al., "Effect of tetracyclic triterpenes (argentatins A, B and D) on the estradiol receptor of hormone-dependent tumors of human breast", <i>Medical Science Research</i> , <u>23</u> (12):815-16 (1995).	
	24.	CHIU, C. P. et al., "Replicative senescence and cell immortality: the role of telomeres and telomerase", <i>Proc. Soc. Exp. Biol. Med.</i> , <u>214</u> (2):99-106 (Feb 1997).	
	25.	CHU, D-T. et al., "Fractionated extract of <i>Astragalus membranaceus</i> , a Chinese medicinal herb, potentiates lak cell cytotoxicity generated by a low dose of recombinant interleukin-2," <i>J. Clin. Lab. Immunol.</i> , <u>26</u> :183-7 (1988).	
	26.	CHU, D-T. et al., "Immunotherapy with Chinese medicinal herbs. II Reversal of cyclophosphamide-induced immune suppression by administration of fractionated <i>Astragalus membranaceus</i> in vivo," <i>J. Clin. Lab. Immunol.</i> , <u>25</u> :125-9 (1988).	
	27.	DAGARAG, M. et al., "Differential impairment of lytic and cytokine functions in senescent human immunodeficiency virus type 1-specific cytotox T lymphocytes", <i>Journal of Virology</i> , <u>77</u> (5):3077-83 (2003).	
	28.	FARWELL, D. G. et al., "Genetic and epigenetic changes in human epithelial cells immortalized by telomerase", <i>American Journal of Pathology</i> , <u>156</u> (5):1537-47 (2000).	
	29.	FUJIMOTO, R. et al., "Expression of telomerase components in oral keratinocytes and squamous cell carcinomas", <i>Oral Oncology</i> , <u>37</u> (2):132-40 (2001).	
	30.	HARLEY, C. B. et al., "Telomeres shorten during ageing of human fibroblasts", <i>Nature</i> , <u>345</u> (6274):458-60 (1990).	
	31.	HENDERSON, S. et al., "In situ analysis of changes in telomere size during replicative aging and cell transformation", <i>Journal of Cell Biology</i> , <u>134</u> (1):1-12 (1996).	
	32.	IONKOVA, I., " <i>Astragalus</i> species (Milk Vetch): in Vitro culture and the production of saponins, astragaline, and other biologically active compounds," <i>Biotechnology in Agriculture and Forestry, Vol. 33, Medicinal and Aromatic Plants VIII</i> , Y. Bajaj, Ed., Springer Verlag, Berlin, pp. 97-138 (1995).	
	33.	JUNTAO, L. et al., "Effect of retinoic acid and ginseng on the telomerase activity in the liver cancer cell," <i>J. Trop. Med.</i> <u>2</u> (1):39-40 (2002).	
	34.	KANEKO, M. et al., "Accelerated recovery from cyclophosphamide-induced leukopenia in mice administered a Japanese ethical herbal drug, <i>Hochu-ekki-to</i> ", <i>Immunopharmacology</i> , <u>44</u> (3):223-231 (1999).	
	35.	KANG, M. K. et al., "Replicative senescence of normal human oral keratinocytes is associated with the loss of telomerase activity without shortening of telomeres", <i>Cell Growth & Differentiation</i> , <u>9</u> (1):85-95 (1998).	
	36.	KHUSHBAKTOVA, Z. A. et al., "Influence of cycloartanes from plants of the genus <i>Astragalus</i> and their synthetic analogs on the contractive function of the rnyocarbium and the activity of Na, K-ATPase", <i>Chemistry of Natural Compounds</i> , <u>30</u> (4):469-473 (1994).	

Examiner Signature		Date Considered	
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				Art Unit	1611
				Confirmation No.	6086
				Examiner Name	LANDAU, Sharmilla Gollamudi
Sheet	3	of	4	Attorney Docket Number	38797-8007.US00 (511/002)

NON PATENT LITERATURE DOCUMENTS

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	37.	KINJO, J. et al., "Anti-herpes virus activity of fabaceous triterpenoidal saponins", <i>Biological & Pharmaceutical Bulletin</i> <u>23</u> (7):887-9 (2000).	
	38.	LEE, K. M. et al., "Immortalization with telomerase of the Nestin-positive cells of the human pancreas", <i>Biochem Biophys Res Commun</i> , <u>301</u> (4):1038-44 (2003).	
	39.	JUNTAO, L. et al., "Effect of retinoic acid and ginseng on the telomerase activity in the liver cancer cell," <i>J. Trop. Med.</i> , <u>2</u> (1):39-40 (2002) (English Abstract).	√
	40.	MATTSON, M. P., "Emerging neuroprotective strategies for Alzheimer's disease: dietary restriction, telomerase activation, and stem cell therapy", <i>Experimental Gerontology</i> , <u>35</u> (4):489-502 (2000).	
	41.	MORALES, C. P. et al., "Absence of cancer-associated changes in human fibroblasts immortalized with telomerase", <i>Nature Genetics</i> , <u>21</u> (1):115-8 (1999).	
	42.	ODA, K. et al., "Adjuvant and haemolytic activities of 47 saponins derived from medicinal and food plants", <i>Biological Chemistry</i> , <u>381</u> (1):67-74 (2000).	
	43.	OH, H. and Schneider, M. D., "The emerging role of telomerase in cardiac muscle cell growth and survival", <i>Journal of Molecular Cellular Cardiology</i> , <u>34</u> (7):717-24 (2002).	
	44.	SIMONSEN, J. L. et al., "Telomerase expression extends the proliferative life-span and maintains the osteogenic potential of human bone marrow stromal cells", <i>Nature Biotechnology</i> , <u>20</u> (6):592-6 (2002).	
	45.	THOMAS, M., Yang, L., and Hornsby, P. J., "Formation of functional tissue from transplanted adrenocortical cells expressing telomerase reverse transcriptase", <i>Nature Biotechnology</i> , <u>18</u> (1):39-42 (2000).	
	46.	VASA, M. et al., "Nitric oxide activates telomerase and delays endothelial cell senescence", <i>Circulation Research</i> , <u>87</u> (7):540-542 (2000).	
	47.	WANG, Y-P. et al., "Effect of astragaloside IV on T, B lymphocyte proliferation and peritoneal macrophage function in mice", <i>Acta Pharmacologica Sinica</i> , <u>23</u> (3): 263-6 (2002).	
	48.	XIAO, H. et al., "Total analytical method for Radix astragali extract using two-binary multi-segment gradient elution liquid chromatography," <i>J. Sep. Sci.</i> , <u>24</u> :186-96 (2001).	
	49.	YANG, J. et al., "Telomerized human microvasculature is functional in vivo", <i>Nature Biotechnology</i> , <u>19</u> (3):219-24 (2001).	
	50.	YANG, J., et al., "Human endothelial cell life extension by telomerase expression", <i>The Journal of Biological Chemistry</i> , <u>274</u> (37):26141-26148 (1999).	
	51.	YUDOH, K. et al., "Reconstituting telomerase activity using the telomerase catalytic subunit prevents the telomere shorting and replicative senescence in human osteoblasts", <i>Journal of Bone and Mineral Research</i> , <u>16</u> (8):1453-1464 (2001).	
	52.	ZHANG W. J. et al., "Regulation of the fibrinolytic potential of cultured human umbilical vein endothelial cells : astragaloside IV downregulates plasminogen activator inhibitor-1 and upregulates tissue-type plasminogen activator expression", <i>Journal of Vascular Research</i> , <u>34</u> (4):273-80 (1997).	
	53.	ZHAO, K. et al., "Enhancement of the immune response in mice by Astragalus membranaceus extracts," <i>Immunopharmacology</i> , <u>20</u> :225-34 (1990).	
	54.	ZHENG, Z. et al., "Studies on chemical constituents and immunological function activity of hairy root of Astragalus membranaceus," <i>Chinese Journal of Biotechnology</i> , <u>14</u> (2):L93-7 (1998).	

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	55.	ZI-PU, L. and Qian, C., "Effects of astragaloside IV on myocardial calcium transport and cardiac function in ischemic rats", <i>Acta Pharmacol Sin</i> 23(10):898-904 (2002).	

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